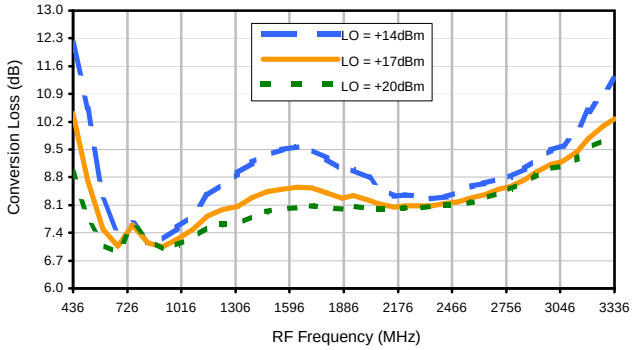
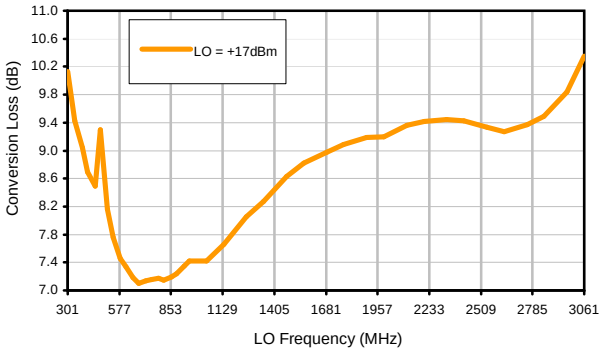
Frequency Mixer HJK-ED9491/1

Typical Performance Curves

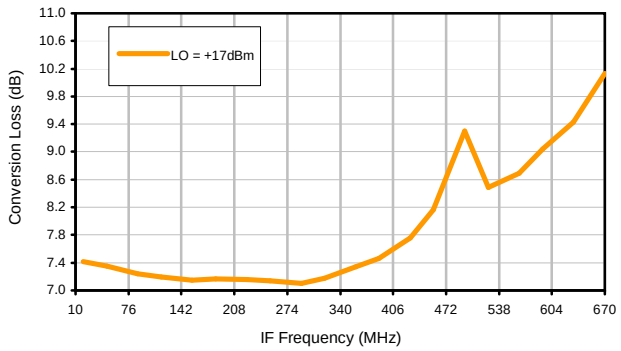
Conversion Loss @ IF=238MHz



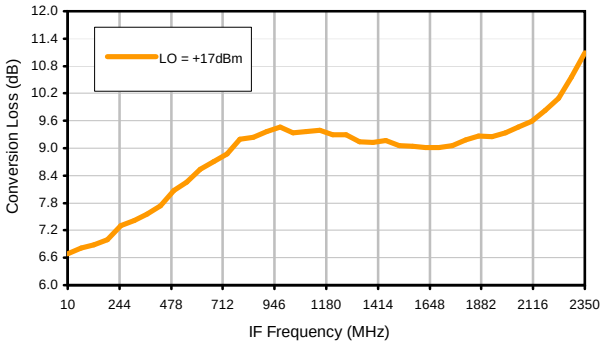
Conversion Loss vs. LO @ RF=971MHz



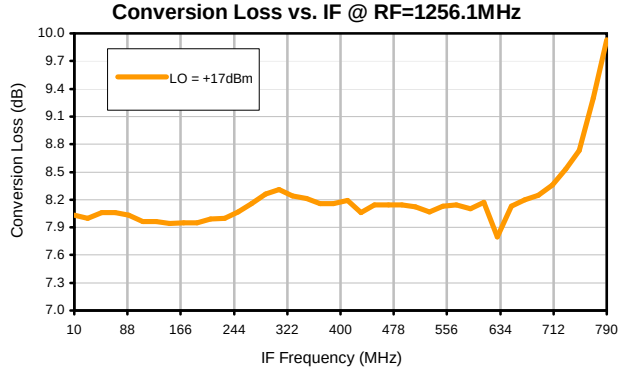
Conversion Loss vs. IF @ RF=971MHz



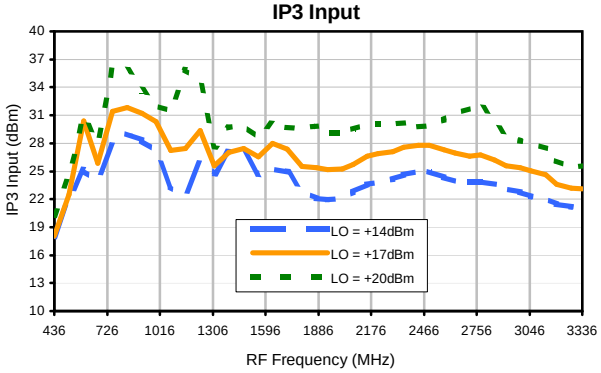
Conversion Loss vs. IF @ RF=685.9MHz



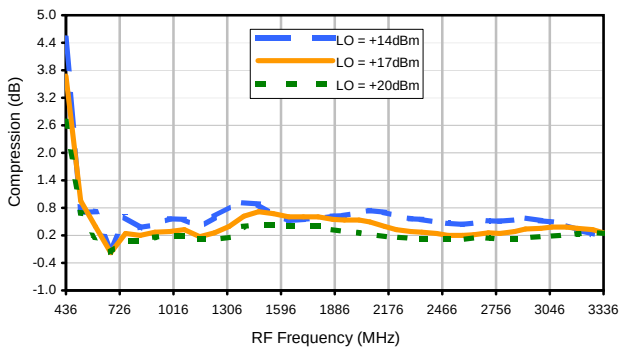
Conversion Loss vs. IF @ RF=1256.1MHz



IP3 Input

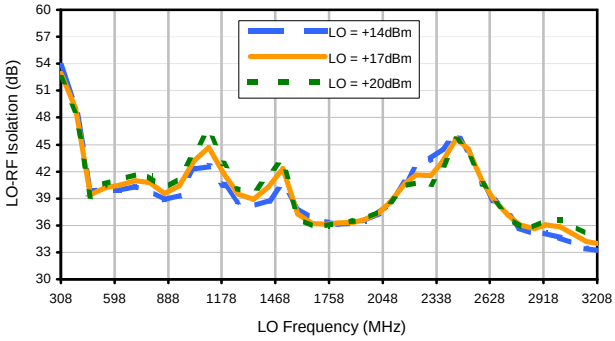


Compression @ RF IN=+17dBm

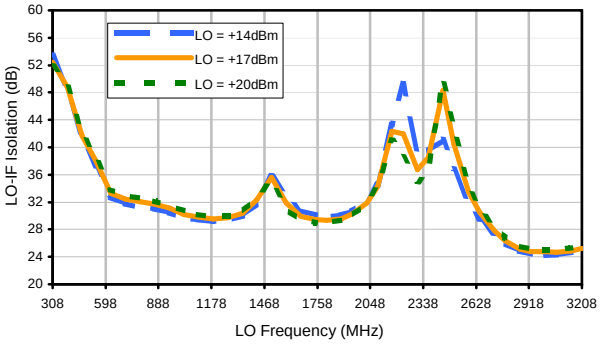


Typical Performance Curves

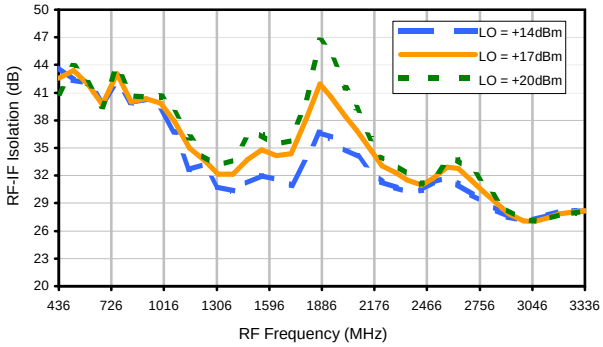
LO-RF Isolation



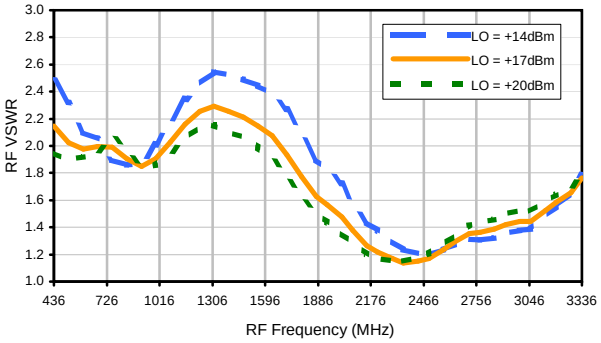
LO-IF Isolation



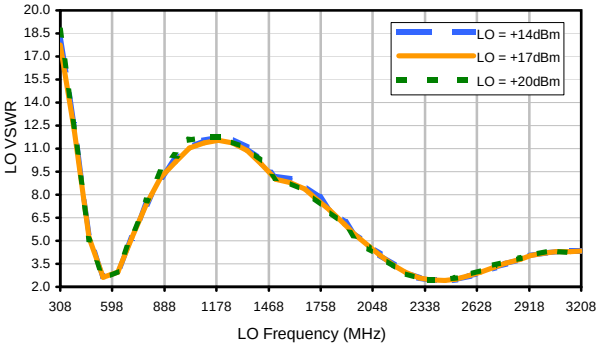
RF-IF Isolation



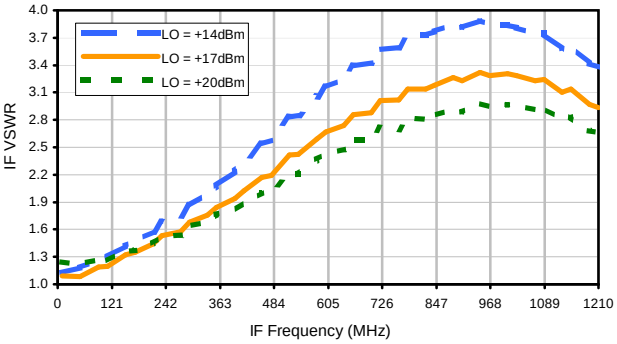
RF VSWR



LO VSWR



IF VSWR



Frequency Mixer HJK-ED9491/1

Harmonics Tables

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	10	18	39	26	54	39	62	53	65	64
1	-	33	+0	41	13	49	22	49	29	49	37	56
2	56	60	51	58	50	58	59	56	60	60	71	58
3	>90	75	58	65	53	64	53	64	53	67	59	68
4	>90	>85	>85	>85	76	>85	74	>85	76	>85	79	>85
5	>90	>85	>85	>85	>85	>85	85	>85	>85	>85	>85	84
6	>90	>85	>85	>85	>85	>85	>85	>85	>85	>85	>85	>85
7	>90	>85	>85	>85	>85	>85	>85	>85	>85	>85	>85	>85
8	>90	>85	>85	>85	>85	>85	>85	>85	>85	>85	>85	>85
9	>90	>85	>85	>85	>85	>85	>85	>85	>85	>85	>85	>85
10	>90	>85	>85	>85	>85	>85	>85	>85	>85	>85	>85	>85
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 971 MHz; 2.00 dBm.
LO IN: 733 MHz; +17.00 dBm
IF OUT: 238 MHz; -5.2 dBm

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	20	28	39	35	46	46	50	51	53	54
1	-	32	+0	42	14	48	24	49	34	50	44	58
2	36	52	43	49	42	50	56	47	53	53	54	56
3	60	54	40	53	36	55	36	56	39	62	46	63
4	82	73	63	63	55	65	56	60	58	60	63	68
5	>90	76	66	70	66	67	57	66	54	65	54	68
6	>90	91	73	82	73	84	66	78	63	73	61	73
7	>90	90	>95	90	83	87	81	85	75	77	74	76
8	>90	>95	90	>95	84	88	79	84	75	84	71	94
9	>90	>95	>95	>95	>95	>95	95	94	>95	86	92	89
10	>90	>95	>95	>95	>95	>95	>95	>95	85	90	88	85
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 971 MHz; 12.00 dBm.
LO IN: 733 MHz; +17.00 dBm
IF OUT: 238 MHz; 4.72 dBm

Notes: 1. All Harmonics are in (dBc) relative to IF OUTPUT.
2. + entry denotes harmonics are in (dBc) above IF OUTPUT.
3. RF Cal represent the Harmonics level of the RF input signal to the mixer.